

ABSTRACT

5 A rotational angioplasty device having a handle housing
and an exchangeable drive shaft cartridge. The handle
housing includes a rotatable prime mover carried by a
prime mover carriage which is longitudinally movable
with respect to the handle housing. The exchangeable
10 drive shaft cartridge includes a tubular core element,
a longitudinally extendible tube, a catheter and a
rotatable drive shaft which, near its distal end, has
an abrasive tissue removal implement. The cartridge is
detachable from the handle housing, the longitudinally
15 extendible tube is detachable from the prime mover
carriage, and the drive shaft together with its tissue
removal implement may be attached to and detached from
the prime mover, thereby permitting the exchangeable
drive shaft cartridge to be selectively attached to and
20 detached from the handle housing. A coupling is
provided which connects the longitudinally extendible
tube to the prime mover carriage while indexing the
relative position of the longitudinally extendible tube
and the proximal portion of the drive shaft.